

is awaited, though it is doubtful in the present state of conflict whether full details of damage done will be available.

The last great shock from near the epicentre appears to have been some sixteen years ago, when 3,000 persons were killed. Earthquakes in the Japanese Islands are relatively frequent, and such as those of July 15, 1941, in the Nagano Prefecture, when thirty houses collapsed killing five people and injuring twelve more, and May 2, 1939, in the Akita district, when 573 houses were completely shattered and 1,218 damaged, killing twenty-six people and injuring twenty-eight others, are common. Most people, however, remember the great earthquakes of Kwantō in 1923, which almost destroyed Tokyo and Yokohama, Tango in 1927 and Idu in 1930, which were fully described by the late Dr. C. Davison. The instability of Japan is part of the instability of the whole of the circum-Pacific circle, though in the case of Japan the instability appears to be enhanced by the proximity of high mountains and great ocean depths.

### 'Natural' and 'Supernatural'

IN an article in the *Hibbert Journal* of April 1943, Mr. G. N. M. Tyrrell discusses the ideas which underlie the terms 'natural' and 'supernatural' and suggests that the emphasis so often laid on the words 'nature' and its derivatives is possibly due to a fear that what he calls 'supernature' may try to return. Pointing out that both in psychology and psychical research we find factors in personalities which have properties midway between those of conscious mind and unconscious matter, Mr. Tyrrell proceeds to say that it is now useless to try to defend an outmoded cosmogony in the face of scientific knowledge. The division between the natural and the supernatural must, he says, be discarded; what is wanted is a fuller appreciation of the fact that the question of objectivity and subjectivity is a question of how much or how little do we ourselves contribute to our own world. As Sir Arthur Eddington has put it, when referring to theoretical physics: "the mathematics is not there till we put it there".

### Captain Thomas Sumner (1807-76)

JUST a century ago the first edition was published of Sumner's "New and Accurate Method of Finding a Ship's Position at Sea", which contained the first description of the "position line" now universally used both at sea and in the air when navigating by the heavenly bodies. An article by R. S. Richardson (*Pub. Astro. Soc. Pacific*, 55, 136; 1943) contains some hitherto unknown biographical details of the man who so profoundly changed the methods of navigation. The facts have come to light as the result of a patient search by Dr. W. Van Lennep in the Harvard Library. Sumner was the son of a Boston architect and entered Harvard at the age of fifteen, three years ahead of Benjamin Peirce, later to become the professor of mathematics whom Sumner consulted regarding the merits of his method. At Harvard he studied mathematics and astronomy under John Farrar. Graduating in 1826 at the age of nineteen, he proceeded to sow his wild oats to such effect that in 1829 he found it advisable to enlist as a common sailor in the China trade. Within eight years he had risen to the rank of captain and was master of his own vessel. In 1837 he made the famous journey during which he discovered in dramatic fashion the principle of the position line.

After six years presumably spent in testing the method and preparing the MS. of his book, he finally published the work in July 1843. It won instant recognition. It was supplied to every vessel in the U.S. Navy in the year of publication, and ran through several editions in the next decade. During this time, however, Sumner's mind was failing. In 1850 he was committed to a Boston lunatic asylum; in 1855 he was "hopelessly deranged"; and in 1865 he entered the Lunatic Hospital at Taunton, Mass., where he died of apoplexy at the age of sixty-nine, having spent in mental darkness the last twenty-six years of a life full of early promise. No doubt the tragic circumstances of his later life are sufficient explanation of the fact that the standard biographical dictionaries do not record so much as the dates of his birth and death.

### Colonial Economic Advisory Committee

THE Secretary of State for the Colonies has set up a Colonial Economic Advisory Committee to give him advice on matters of general economic policy in the Colonial Empire. The members of the committee are: The Duke of Devonshire, Parliamentary Under-Secretary of State (chairman); Mr. G. I. M. Clauson (vice-chairman); Lord Hailey; Sir Bernard Bourdillon; Sir William Goddenough; Sir John Hay; Sir Hubert Henderson; Sir Harold Howitt; Mr. A. Dalgleish; Mr. E. F. M. Durbin; Mr. J. Hallsworth; Mr. J. McFadyen; Mr. J. McLean; Captain B. H. Peter; and Prof. L. C. Robbins. The terms of reference are: "To advise the Secretary of State on such questions of economic policy in relation to the Colonial Dependencies as he may refer to the committee, including particularly matters of general policy arising on programmes of economic development."

### B.B.C. Broadcasts on Applied Physical Science

THE British Broadcasting Corporation is arranging a series of twelve weekly talks beginning on October 1 under the title "Science at your Service", on applied physical science. An attempt is to be made to bring before the layman the numerous ways in which physical science is being used in everyday life and to show that an understanding of the principles of science is essential in the post-war world. The addresses will deal with the home, building construction, plastics, clothing and fabrics, explosives, the structure of the earth's crust, the weather, planning fisheries, life-saving at sea, shipbuilding and tunnelling. It is expected that the speakers will include Sir Lawrence Bragg, Sir Edward Appleton, Sir George Burt and Sir Charles Darwin.

### Industrial Health and Disease

A WEEK-END course for medical practitioners on factory medical services and industrial diseases will be held at the London School of Hygiene and Tropical Medicine during October 2-3. The course will be opened by Dr. E. R. A. Merewether, senior medical inspector of factories, and lectures will be given on the clinical approach to industrial medicine, occupational pneumoconioses, anaemia in war-time, nutrition and vitamins in war-time, prevention of industrial dermatitis, and rehabilitation with special reference to minor injuries. The fee for the course is one guinea, which should reach the secretary of the London School of Hygiene and Tropical Medicine, Keppel Street, Gower Street, London, W.1, not later than September 27.